

SEQUENCE LISTING

<110> Bristol-Myers Squibb Company

<120> POLYNUCLEOTIDE ENCODING A NOVEL HUMAN POTASSIUM CHANNEL BETA-SUBUNIT, K+betaM2

<130> D0076 NP

<150> US 60/263,872

<151> 2001-01-24

<150> US 60/269,794

<151> 2001-02-14

<160> 73

<170> PatentIn version 3.0

<210> 1

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<213> Homo sapiens

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<222> (515)..(1798)

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aaaccaatac ggacatctga gtaactgggg aattggcctg ccttgcatgt gagcttgatg 240

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catccagggt ttaaaactact ttttcagcat cacttoacct gtggactctt atacattttg 360

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tttcccttcc ttacaagttg atccaaagga taaggctgtg actccattgg attgcacctt 480

taaatcaaaa tagcagcagc agaagaaaagg gaca atg gct ctg agt gga aac tgt 535

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Pro Glu Val Val Glu Leu Asn Val Gly Gly Gln Val Tyr Phe Thr Arg
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cat tcc aca ttg ata agc atc cct cat tcc ctc ctg tgg aaa atg ttt His Ser Thr Leu Ile Ser Ile Pro His Ser Leu Leu Trp Lys Met Phe 40 45 50 55	679
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ccc cct tcc tcc ctg ctc cct gcc gac cgc aag tgg ggt ttc att act Pro Pro Ser Ser Leu Leu Pro Ala Asp Arg Lys Trp Gly Phe Ile Thr 155 160 165	1015
gtg ggt tac aga gga tcc tgc acc ttg ggc aga gag gga cag gca gat Val Gly Tyr Arg Gly Ser Cys Thr Leu Gly Arg Glu Gly Gln Ala Asp 170 175 180	1063
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ttg gca aaa gaa gtc ttt gga gaa act ttg aat gaa agc aga gac cct Leu Ala Lys Glu Val Phe Gly Glu Thr Leu Asn Glu Ser Arg Asp Pro 200 205 210 215	1159
gat cga gcc cca gaa aga tac acc tcc aga ttt tat ctc aaa ttc aag Asp Arg Ala Pro Glu Arg Tyr Thr Ser Arg Phe Tyr Leu Lys Phe Lys 220 225 230	1207
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gtg gcc tgt aac tca tgg gtg aca gca tct ttc atc aac caa tat aca Val Ala Cys Asn Ser Ser Val Thr Ala Ser Phe Ile Asn Gln Tyr Thr 250 255 260	1303
gat gac aag atc tgg tca agc tac act gaa tat gtc ttc tac cgt gag	1351

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Pro	Ser	Arg	Trp	Ser	Pro	Ser	His	Cys	Asp	Cys	Cys	Cys	Lys	Asn	Gly		
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Arg	Pro	Ile	Lys	Lys	Gly	Pro	Val	Gln	Leu	Ile	Gln	Gln	Ser	Glu	Met		
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Arg	Arg	Lys	Ser	Asp	Leu	Arg	Ile	Leu	Thr	Ser	Gly	Ser	Arg	Glu			
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Gly Gln Val Tyr Phe Thr Arg His Ser Thr Leu Ile Ser Ile Pro His
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50 55 60

Leu Ala Lys Asp Ser Lys Gly Arg Phe Phe Ile Asp Arg Asp Gly Phe
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Leu Phe Arg Tyr Ile Leu Asp Tyr Leu Arg Asp Arg Gln Val Val Leu
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Pro Asp His Phe Pro Glu Lys Gly Arg Leu Lys Arg Glu Ala Glu Tyr
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Phe Gln Leu Pro Asp Leu Val Lys Leu Leu Thr Pro Asp Glu Ile Lys
115 120 125

Gln Ser Pro Asp Glu Phe Cys His Ser Asp Phe Glu Asp Ala Ser Gln
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Gly Ser Asp Thr Arg Ile Cys Pro Pro Ser Ser Leu Leu Pro Ala Asp
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165 170 175

Gly Arg Glu Gly Gln Ala Asp Ala Lys Phe Arg Arg Val Pro Arg Ile
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Leu Val Cys Gly Arg Ile Ser Leu Ala Lys Glu Val Phe Gly Glu Thr
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Leu Asn Glu Ser Arg Asp Pro Asp Arg Ala Pro Glu Arg Tyr Thr Ser
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Arg Phe Tyr Leu Lys Phe Lys His Leu Glu Arg Ala Phe Asp Met Leu
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Ser Glu Cys Gly Phe His Met Val Ala Cys Asn Ser Ser Val Thr Ala
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Ser Phe Ile Asn Gln Tyr Thr Asp Asp Lys Ile Trp Ser Ser Tyr Thr
260 265 270

Glu Tyr Val Phe Tyr Arg Glu Pro Ser Arg Trp Ser Pro Ser His Cys
275 280 285

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Thr Ser Cys Asn Asp Leu Ser Thr Ser Ser Cys Asp Ser Gln Ser Glu
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Ala Ser Ser Pro Gln Glu Thr Val Ile Cys Gly Pro Val Thr Arg Gln
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Leu Thr Ser Gly Ser Arg Glu Ser Asn Met Ser Ser Lys Lys Lys Ala
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Val Lys Glu Lys Leu Ser Ile Glu Glu Glu Leu Glu Lys Cys Ile Gln
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 35 40 45
 Ala Arg Asp Pro Gln Gly Asn Tyr Phe Ile Asp Arg Asp Gly Pro Leu
 50 55 60
 Phe Arg Tyr Val Leu Asn Phe Leu Arg Thr Ser Glu Leu Thr Leu Pro
 65 70 75 80
 Leu Asp Phe Lys Glu Phe Asp Leu Leu Arg Lys Glu Ala Asp Phe Tyr
 85 90 95
 Gln Ile Glu Pro Leu Ile Gln Cys Leu Asn Asp Pro Lys Pro Leu Tyr
 100 105 110
 Pro Met Asp Thr Phe Glu Glu Val Val Glu Leu Ser Ser Thr Arg Lys
 115 120 125
 Leu Ser Lys Tyr Ser Asn Pro Val Ala Val Ile Ile Thr Gln Leu Thr
 130 135 140
 Ile Thr Thr Lys Val His Ser Leu Leu Glu Gly Ile Ser Asn Tyr Phe
 145 150 155 160

Thr Lys Trp Asn Lys His Met Met Asp Thr Arg Asp Cys Gln Val Ser
165 170 175

Phe Thr Phe Gly Pro Cys Asp Tyr His Gln Glu Val Ser Leu Arg Val
180 185 190

His Leu Met Glu Tyr Ile Thr Lys Gln Gly Phe Thr Ile Arg Asn Thr
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Arg Val His His Met Ser Glu Arg Ala Asn Glu Asn Thr Val Glu His
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Asn Trp Thr Phe Cys Arg Leu Ala Arg Lys Thr Asp Asp
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35 40 45

Phe Leu Asp Arg Asp Gly Val Leu Phe Arg Tyr Ile Leu Asp Phe Leu
50 55 60

Arg Asp Lys Ala Leu His Leu Pro Glu Gly Phe Arg Glu Arg Gln Arg
65 70 75 80

Leu Leu Arg Glu Ala Glu His Phe Lys Leu Thr Ala Met Leu Glu Cys
85 90 95

Ile Arg Ser Glu Arg Asp Ala Arg Pro Gly Cys Ile Thr Ile Gly
100 105 110

Tyr Arg Gly Ser Phe Gln Phe Gly Lys Asp Gly Leu Ala Asp Val Lys
115 120 125

Phe Arg Lys Leu Ser Arg Ile Leu Val Cys Gly Arg Val Ala Gln Cys
130 135 140

Arg Glu Val Phe Gly Asp Thr Leu Asn Glu Ser Arg Asp Pro Asp His
145 150 155 160

Gly Gly Thr Asp Arg Tyr Thr Ser Arg Phe Phe Leu Lys His Cys Tyr
165 170 175

Ile Glu Gln Ala Phe Asp Asn Leu His Asp His Gly Tyr Arg Met Ala
180 185 190

Gly Ser Cys Gly Ser Gly Thr Ala Gly Ser Ala Ala Glu Pro Lys Pro
195 200 205

Gly Val Asp Thr Glu Glu Asn Arg Trp Asn His Tyr Asn Glu Phe Val
210 215 220

Phe Ile Arg Asp
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<213> Caenorhabditis elegans

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20 25 30

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35 40 45

Val Thr Leu Pro Asp Gly Thr Leu Phe Val Asp Arg Asp Gly Pro Leu
50 55 60

Phe Ala Tyr Val Leu His Phe Leu Arg Thr Asp Lys Leu Ser Leu Pro
65 70 75 80

Glu Gln Phe Arg Glu Val Ala Arg Leu Lys Asp Glu Ala Asp Phe Tyr
85 90 95

Arg Leu Glu Arg Phe Ser Thr Leu Leu Ser Asn Ala Ser Ser Ile Ser
100 105 110

Pro Arg Pro Arg Thr Ala Asn Gly Tyr Asn Thr Ile Thr Ser Gly Ala
115 120 125

Glu Thr Gly Gly Tyr Ile Thr Leu Gly Tyr Arg Gly Thr Phe Ala Phe
130 135 140

Gly Arg Asp Gly Gln Ala Asp Val Lys Phe Arg Lys Leu His Arg Ile
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Thr	Lys	Tyr	Pro	Glu	Ser	Arg	Ile	Gly	Arg	Leu	Phe	Asp	Gly	Thr	Glu
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Pro	Ile	Val	Leu	Asp	Ser	Leu	Lys	Gln	His	Tyr	Phe	Ile	Asp	Arg	Asp
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Gly	Gln	Met	Phe	Arg	Tyr	Ile	Leu	Asn	Phe	Leu	Arg	Thr	Ser	Lys	Leu
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Leu	Ile	Pro	Asp	Asp	Phe	Lys	Asp	Tyr	Thr	Leu	Leu	Tyr	Glu	Glu	Ala
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Lys	Tyr	Phe	Gln	Leu	Gln	Pro	Met	Leu	Leu	Glu	Met	Glu	Arg	Trp	Lys
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Lys	Ser	Leu	Ile	Glu	Glu	Val	Phe	Pro	Glu	Ile	Gly	Asp	Val	Met	Cys
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Arg	Leu	Gln	Gln	Arg	Gly	Phe	Glu	Ile	Val	Gly	Ser	Cys	Gly	Gly	Gly
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Val	Asp	Ser	Ser	Gln	Phe	Ser	Glu	Tyr	Val	Leu	Arg	Arg	Glu	Leu	Arg
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Pro Lys Arg Asp Thr Ala Asn Asp Leu Ala Lys Asp Ser Lys Gly Arg
 35 40 45

Phe Phe Ile Asp Arg Asp Gly Phe Leu Phe Arg Tyr Ile Leu Asp Tyr
 50 55 60

Leu Arg Asp Arg Gln Val Val Leu Pro Asp His Phe Pro Glu Lys Gly
 65 70 75 80

Arg Leu Lys Arg Glu Ala Glu Tyr Phe Gln Leu Pro Asp Leu Val Lys
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Leu Leu Thr Pro Asp Glu Ile
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Ile Asn Gln Tyr Thr
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Phe Ser Gly Arg Met Glu Val Leu Thr Asp Ser Glu Gly Trp Ile Leu
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Ile Asp Arg Cys Gly Asn His Phe Gly Ile Ile Leu Asn Tyr Leu Arg
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Leu Lys Pro Ala Val Ile Leu Val Val Gln Arg Gln Asn Asn Lys Tyr
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Asp Val Ile Gly Pro Ser Glu Ile Cys Cys Trp Ser Phe Tyr Gly His
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Asp Arg Lys His Thr Lys Val Glu Phe Pro Glu Ala Arg Ile Tyr Glu
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